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10/582,550

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EXAMINER

NGUYEN, TRINH T

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,550	Applicant(s) DAY ET AL.	
	Examiner Trinh T. Nguyen	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Response dated 6/26/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8,12-20,23-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Robohm (US 6557492).

For claim 1, Robohm teaches an apparatus for storing aquatic animals, comprising a tank (205) for receipt of the aquatic animals, and an arrangement to create a foam environment (create by oxygen delivery system (300)) in the interior of the tank and configured such that at least a majority of the aquatic animals when stored in the tank are submerged in foam.

For claim 2, Robohm teaches the arrangement configured to create a foam environment in the interior of the tank is configured to deliver a foam (create by oxygen delivery system (300)) to the interior of the tank.

For claim 3, Robohm teaches the arrangement to create a foam environment (create by oxygen delivery system (300)) in the interior of the tank comprises a device configured to apply foam over at least a majority of the aquatic animals when stored in the tank.

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For claim 4, Robohm teaches the arrangement to create a foam environment (create by oxygen delivery system (300)) in the interior of the tank is configured to deliver a synthetic foam to the interior of the tank.

For claim 5, Robohm teaches the arrangement to create a foam environment (create by oxygen delivery system (300)) in the interior of the tank is configured to generate foam.

For claims 6,14 and 19, Robohm teaches the arrangement to create a foam environment (create by oxygen delivery system (300)) in the interior of the tank (205) comprises a fluid recirculation arrangement which is configured to recirculate fluid from a lower region of the interior of the tank in which the aquatic animals are to be stored to a higher region of the interior of the tank, such that the fluid passes over at least a majority of the aquatic animals when stored in the tank and the natural proteins of the aquatic animals create a foam as the fluid is recirculated (see lines 58-67 of col. 5).

For claims 7,12 and 23, Robohm teaches the arrangement to create a foam environment in the interior of the tank is additionally configured to introduce one or more property-enhancing substances into the fluid or foam (see lines 27-40 of col. 15).

For claim 8, Robohm teaches the arrangement to create a foam environment (create by oxygen delivery system (300)) in the interior of the tank is configured to introduce pressurised gas into the fluid to enhance foam generation.

For claims 13 and 24, Robohm teaches wherein the gas is air.

For claim 15, Robohm teaches the storing of aquatic animals (see Abstract).

For claim 16, Robohm teaches loading the aquatic animals into the interior of the tank, and creating a foam environment (create by oxygen delivery system (300)) in the interior of the tank such that at least a majority of the aquatic animals in the tank are submerged in foam.

For claim 17, Robohm teaches packing the aquatic animals relatively tightly in the interior of the tank to form a packed bed, so that the foam moves slowly around the aquatic animals in the tank (since Robohm teaches the aquatic animals are shellfish, it is noted that the step of "packing the aquatic animals relatively tightly in the interior of the tank to form a packed bed" is inherently performed within Robohm's apparatus).

For claim 18, Robohm teaches generating foam (create by oxygen delivery system (300)) from the natural proteins of the aquatic animals.

For claim 20, Robohm teaches mixing pressurised gas with the fluid to enhance foam generation (create by oxygen delivery system (300)).

For claims 25 and 26, Robohm teaches the aquatic animals are shellfish and mussels are considered as shellfish.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robohm.

For claims 11 and 22, Robohm discloses most of the claimed invention except for mentioning the gas is refrigerated or humidified. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the teaching of Robohm to have included the gas is refrigerated or humidified, since the Examiner takes Official Notice that such concept is old and well known technique used throughout the art of transporting live aquatic animals so as to prolong the life of aquatic animals.

For claim 21, it would have been obvious to one having ordinary skill in the art at the time the invention was made to introduce the pressurized gas of Robohm in pulses so as to efficiently supply amount of gas into the tank.

5. Claim 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robohm in view of Ohnari (US 6382601).

For claim 9, as described above, Robohm teaches all the claimed invention except for an arrangement to introduce pressurised gas into the fluid pathway which generates a vacuum to suck fluid from the lower region of the tank and deliver fluid to the higher region of the tank via the fluid pathway, to apply the fluid as a foam over at least a majority of the aquatic animals when stored in the tank.

Ohnari teaches a similar apparatus as that of Robohm wherein Ohnari's apparatus includes an arrangement to introduce pressurised gas (through members 50,50',500,500') into the fluid pathway which generates a vacuum to suck fluid from the lower region of the tank and deliver fluid to the higher region of the tank via the fluid pathway (inherently performed within Ohnari's apparatus). It would have been obvious

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to one having ordinary skill in the art at the time the invention was made to have modified the apparatus of Robohm so as to include an arrangement to introduce pressurised gas into the fluid pathway, in a similar manner as taught in Ohnari, so as to promote a better fluid recirculation arrangement.

For claim 10, it would have been obvious to one having ordinary skill in the art at the time the invention was made to introduce the pressurized gas of Robohm as modified by Ohnari (emphasis on Robohm) in pulses so as to efficiently supply amount of gas into the tank.

Response to Arguments

6. Applicant's arguments filed 6/26/09 have been fully considered but they are not persuasive.

7. Applicant further argues that Robohm does not teach the foam-creating arrangement is configured such that at least a majority of the aquatic animals when stored in the tank are submerged in foam, Applicant's argument has been acknowledged by the Examiner. However, it is noted that the recitation that an element is "configured to" or "adapted to" or "capable of" performing a function is not a positive limitation but only requires the ability to so perform and it does not constitute a limitation in any patentable sense. Therefore, so as long as the foam-creating arrangement of Robohm has a similar structural components as to those of Applicant's invention, which it does, then it is configured to (or capable of or adapted to) perform such function which is to create foam. Furthermore, it is noted that if a majority of the aquatic animals (such as shellfish) are placed into the interior bottom of the tank of Robohm then the majority

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of the aquatic animals will be submerged in foam (or oxygen bubbles) created by the oxygen delivery end (310).

8. With respect to Applicant's argument regarding to claim 14, it is noted that the recitation that an element is "configured to" or "adapted to" or "capable of" performing a function is not a positive limitation but only requires the ability to so perform and it does not constitute a limitation in any patentable sense. Therefore, so as long as the fluid recirculation arrangement of Robohm has a similar structural components as to those of Applicant's invention, which it does, then it is configured to (or capable of or adapted to) perform such function which is to recirculate fluid. Also, it is unclear how the fluid recirculation arrangement as claimed in claim 14 is configured to recirculate fluid from a lower region of the interior of the tank in which the aquatic animals are to be stored to a higher region of the interior of the tank such that the fluid passes over at least a majority of the aquatic animals when stored in the tank and the natural proteins of the aquatic animals create a foam as the fluid is recirculated since there are no structural components define for the fluid recirculation arrangement to carry out the recirculation of fluid from a lower region of the interior of the tank and that the fluid passes over at least a majority of the aquatic animals stored in the tank.

9. Since Appellant has challenged the Official Notice, reference Lawrence et al. (US 4,155,331), which discloses that the concept of utilizing refrigerated gas in the aide of storing and/or preserving animals/organisms, has been cited, which for purposes of appeal can be treated as having been substituted for the Official Notice taken herein.

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10. With respect to Applicant's argument regarding to claim 21, it is noted that the concept of introducing a pressurized gas in pulses so as to efficiently supply a steady amount of gas into a body of water is notoriously well known concept in the art (see [0022] and [0023] of US 2003/0080444).

11. Finally, Applicant argues that Ohnari does not teach a system in which the majority of aquatic animals are submerged in foam, Applicant's argument has been acknowledged. However, it is noted that the recitation that an element is "configured to" or "adapted to" or "capable of" performing a function is not a positive limitation but only requires the ability to so perform and it does not constitute a limitation in any patentable sense. Furthermore, it is noted that Robohm was cited to show the teaching of a foam-creating arrangement in a tank which is configured to (or capable of or adapted to) create a foam environment in the interior of the tank and that if a majority of the aquatic animals (such as shellfish) are placed into the interior bottom of the tank of Robohm then the majority of the aquatic animals will be submerged in foam (or oxygen bubbles) created by the oxygen delivery end (310).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh T. Nguyen whose telephone number is (571) 272-6906. The examiner can normally be reached on M-F (1:30 P.M to 10:00 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on (571) 272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Trinh T Nguyen/

Primary Examiner, Art Unit 3644

11/2/09